

Divide Creek Bridge
Spanning Divide Creek, on Going-to-the-Sun Road
Glacier National Park
Flathead County
Montana

WEST
GLACIER

HAER No. MT-85

HAER
MONT,
15-WEGLA,
15-

PHOTOGRAPHS
WRITTEN HISTORICAL AND DESCRIPTIVE DATA

Historic American Engineering Record
National Park Service
Department of the Interior
Washington, DC 20013-7127

HISTORIC AMERICAN ENGINEERING RECORD

DIVIDE GREEK BRIDGE
HAER MT-85

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MONT,
15-WEGLA
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Location: Spanning Divide Creek, just west of St. Mary, on Going-to-the-Sun Road, Glacier National Park, Glacier County, Montana
UTM: St. Mary Quad. 12/321300/5401620

Date of Construction: 1935

Structural Type: Three-span reinforced concrete slab bridge

Contractor: Lawler Corporation, Butte, Montana

Engineer: Bureau of Public Roads

Owner: Glacier National Park

Use: Vehicular bridge

Significance: The Divide Creek Bridge is one of approximately seventeen prominent masonry and concrete structures on Going-to-the-Sun Road in Glacier National Park. The 51-mile stretch of scenic road is significant as a unique engineering accomplishment of the early twentieth century, and as the first product of a 1925 cooperative agreement between the National Park Service and the Bureau of Public Roads. The Divide Creek Bridge was unique among structures on the road because it lay halfway out of the park, but otherwise conformed to the specifications that determined the construction of the road.

Project Information: Documentation of the Divide Creek Bridge is part of the Going-to-the-Sun Road Recording Project, conducted during the summer of 1990 under the co-sponsorship of HABS/HAER and Glacier National Park. Researched and written by Kathryn Steen, HAER Historian, 1990. Edited and transmitted by Lola Bennett, HAER Historian, 1992.

Going-to-the-Sun Road

The Divide Creek Bridge is a three-span reinforced concrete slab bridge that marks the eastern entrance to Glacier National Park on Going-to-the-Sun Road, a scenic park road that winds through the spectacular mountains and valleys in the middle of the park. The 51-mile road, built in sections between 1911 and 1933 and rebuilt for the next two decades, runs east and west through the park. Starting in the west, the road runs from West Glacier, along the 10-mile eastern shore of Lake McDonald and then up McDonald Creek for an additional ten miles. About one mile beyond the junction with Logan Creek, the road begins its ascent to Logan Pass. The road climbs at a 6 percent grade, passes through a tunnel, and turns at a major switchback called the Loop. The road then follows the contours of the sides of Haystack Butte and Pollock Mountain, passing over several bridges, culverts and retaining walls before reaching Logan Pass. The road descends to the east along the sides of Piegan Mountain and Going-to-the-Sun Mountain before running along the north shore of St. Mary Lake. The road exits the park as it crosses Divide Creek near St. Mary.¹

Significance of the Road

Going-to-the-Sun Road is significant as an outstanding engineering feat of the early twentieth century. In addition, the road was the first product of the interagency cooperative agreement between the National Park Service (NPS) and the Bureau of Public Roads (BPR). The agreement, signed in 1925, allowed the National Park Service to utilize the roadbuilding expertise of the Bureau of Public Roads while still retaining control to protect the landscape.²

Divide Creek Bridge

In July 1933, Glacier National Park celebrated the completion of the Going-to-the-Sun Road with a dedication ceremony at Logan Pass. Even as they noted their achievements, however, the NPS and BPR had plans for major reconstruction on the parts of the road built before 1925. About twenty miles on the west end and eight miles on the east end of the road had narrower roadways, tighter curves, and several log culverts and bridges. During the spring of 1934, the park and BPR advertised the contract for the construction of two bridges at the very eastern end of the Going-to-the-Sun Road, the Divide Creek Bridge and the St. Mary River Bridge. The Lawler Corporation of Butte, Montana, submitted the low bid of \$94,695 on May 23, 1934.³

The Lawler Corporation immediately started work on the St. Mary River Bridge, but construction on the Divide Creek Bridge was delayed by legal and funding difficulties. Divide Creek marked the boundary of Glacier National Park, and the park officials needed to get the permission for a right-of-way on the opposite side of the river, as well as special funding. On June 29, 1935, more than one year after Lawler signed the contract, the contractor received permission to begin construction on the Divide Creek Bridge. That left just twenty-five days on his contract before the specified \$25 per late

finer started to accumulate. Lawler finished the contract forty-three days late and had collected a fine of \$1075, but the BPR recommended the fine be waived since the delay was not caused by the contractor.⁴

After Lawler received permission to proceed, the contractor first used his power shovel to change the channel of the stream. The shovel ran 350' upstream and 300' downstream to execute the "channel correction." Early in July, Lawler excavated and poured the footings for the abutments and piers. The contractor spent most of the latter half of July erecting the falsework and installing the steel reinforcing rod before pouring the slab on July 31. Lawler completed the masonry in late August and applied a crushed rock surface to the bridge roadway. Lawler finished the bridge, including the approaches, on September 4, 1935 at a cost of \$11,110.19.⁵

Description

The Divide Creek Bridge is a three-span reinforced concrete slab bridge. The middle span is 20' long and the two outside spans are 16' long. At the bridge site, Divide Creek flows north, just prior to running into the St. Mary River. The most notable feature of the Divide Creek Bridge is the accumulation of the gravel of the creek bed in the middle and eastern spans. Water normally flows only through the western most span of the bridge. The reinforced concrete slab is topped by a masonry guardrail.⁶

ENDNOTES

1. See the Historic American Engineering Record report HAER MT-67 on the Going-to-the-Sun Road.

2. C.H. Purcell, F.A. Kittredge, J.A. Elliott, T.C. Vint, and C.J. Kraebel, Suggested Procedure for Cooperation Between the National Park Service and the Bureau of Public Roads in Major Traffic-Way Projects Within the National Parks, April 22, 1925 (Record Group 79, National Archives, Washington, D.C.)

3. John Zoss, "Final Construction Report (1934-1935) on St. Mary's River and Divide Creek Bridges With Approaches, Glacier National Park, Project 1-E2" (Glacier National Park Library Historical File).

4. Zoss, "Final Construction Report."

5. Zoss, "Final Construction Report."

6. Zoss, "Final Construction Report."

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Historic American Engineering Record. "HAER MT-67: Going-to-the-Sun Road."
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Purcell, C.H., F.A. Kittredge, J.A. Elliott, T.C. Vint, and C.J. Kraebel.
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